



UNIVERSITY OF SARAJEVO – FACULTY OF SCIENCE
SUBJECT DESCRIPTION

Form SP2

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Subject code: GE-401.6-4		Subject name: Geoeological Problems of Bosnia and Herzegovina	
Study cycle: I	Year: IV	Semester: VIII	ECTS credits: 6
Status: Mandatory		Contact hours: 60 Lectures: 30 Practical courses: 30	
Assigned professors and assistants:		Lecturers and assistants selected for the field to which the course belongs.	
Prerequisites:		/	
Subject objectives:		Introducing the main types of natural and anthropogenic disasters, assessing the likelihood of their occurrence, estimating the expected degree of loss (i.e., risk assessment), and protection measures. Students will also master the technique of creating risk maps.	
Teaching units:		1. Introduction, concepts, terminology (risks, hazards, and disasters as geoeological problems). 2. Indicators for monitoring environmental impact changes. Risk management. 3. Earthquakes and tsunamis worldwide and earthquakes in BiH: causes, occurrences, and consequences on geoeological habitats. 4. Geoeological water problems in BiH: floods, karst water—specifics of BiH. 5. Droughts as a geoeological problem in BiH. 6. Soil as a geoeological problem in BiH (state, structure, and quality of agricultural land and the potential for sustainable agricultural production). 7. Landslides and avalanches in BiH as hazards. 8. First test. 9. Atmospheric hazards (frost, hail) in BiH as a geoeological problem. Acid rain: occurrence, distribution, causes, and consequences. 10. Winds and atmospheric hazards in BiH. 11. Forests (structure and quality of forest resources, state of other forest resources). 12. Fires as a geoeological problem in BiH. 13. Resource exploitation as a geoeological problem in BiH. 14. Environmental protection, establishment of monitoring systems. 15. Minefields as a geoeological problem.	



Learning outcomes:	Knowledge: • student acquires knowledge about the main types of natural and anthropogenic disasters, as well as assessments of the likelihood of their occurrence. • student gains knowledge about estimating the expected degree of loss (risk assessment) and protective measures. Skills: • student independently applies indicators for monitoring changes in environmental impacts. • student independently analyzes and correlates monitoring data on the state of the environment. • Mastery of the technique for creating risk maps. Competencies: • student independently interprets hazard occurrence assessments in Bosnia and Herzegovina. • student independently determines and causally examines methods of risk management in Bosnia and Herzegovina.																																													
Teaching methods:	Multimedia presentation and discussion (lectures); practical work, educational material analysis and discussion (practical courses).																																													
Knowledge testing methods with grading structure¹:	<table><tr><td></td><td colspan="2"><i>Points</i></td></tr><tr><td>Attendance</td><td>5</td><td>3</td></tr><tr><td>Participation on lectures</td><td>5</td><td>3</td></tr><tr><td>Tests</td><td>40</td><td>22</td></tr><tr><td>Seminar paper</td><td>10</td><td>6</td></tr><tr><td>Final exam</td><td>40</td><td>21</td></tr><tr><td colspan="3"> </td></tr><tr><td>TOTAL</td><td>100</td><td>55</td></tr></table> Assessment: <table><tr><td><i>Grade</i></td><td><i>ECTS grade</i></td><td><i>Points scale</i></td></tr><tr><td>10</td><td>(A) excellent</td><td>95 - 100</td></tr><tr><td>9</td><td>(B) very good</td><td>85 - 94</td></tr><tr><td>8</td><td>(C) good</td><td>75 - 84</td></tr><tr><td>7</td><td>(D) satisfactory</td><td>66 - 74</td></tr><tr><td>6</td><td>(E) sufficient</td><td>55 - 64</td></tr><tr><td>5</td><td>(F, FX) insufficient</td><td>55</td></tr></table>		<i>Points</i>		Attendance	5	3	Participation on lectures	5	3	Tests	40	22	Seminar paper	10	6	Final exam	40	21				TOTAL	100	55	<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>	10	(A) excellent	95 - 100	9	(B) very good	85 - 94	8	(C) good	75 - 84	7	(D) satisfactory	66 - 74	6	(E) sufficient	55 - 64	5	(F, FX) insufficient	55
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¹ The structure of points and point criteria for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught in accordance with Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton



Literature²:

Mandatory:

- Spahić, M.: Osnove geoekologije, Harfo-graf Tuzla, 1999.
- Međunarodna strategija za smanjenje rizika od katastrofa, Ženeva, 2009., www.unisdr.org/publications
- Izvještaj o stanju okoliša FBiH, Fond za zaštitu okoliša FBiH, 2022. Dostupno na: https://fzofbih.org.ba/wp-content/uploads/2022/10/ISO_FBiH_izvjestaj.pdf

Recommended:

- Hrvatović, H. (2005): Identifikacija i procjena geoloških hazarda-zemljotresa. Dostupno na: <http://www.msb.gov.ba/dokumenti/AB38725.pdf>
- Procjena ugroženosti Bosne i Hercegovine od prirodnih ili drugih nesreća, Vijeće ministara Bosne i Hercegovine, 2011. Dostupno na: http://www.msb.gov.ba/PDF/PROCJENA_UGRO%C5%BDENOSTI_BIH_07102013.pdf

² The Senate of the higher education institution as an institution or a council of the organizational unit of the higher education institution as a public institution determines mandatory and recommended textbooks and manuals, as well as other recommended literature on the basis of which exams are prepared by a special act which is required to be published on its website before the beginning of the academic year in accordance with Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton.